# RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation DT1241 02/2011

#### **INSTRUCTIONS:**

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

Wis	DOT research program	category:				Report period							
□ F	Policy research		m										
	Other	☐ Pooled fu	und TF	PF#		☐ Quarter 2 (Apr 1 – Jun 30) ☐ Quarter 3 (Jul 1 – Sep 30)							
						Quarter 4 (Oct 1 – Dec 31)							
			_				,						
Proj	ect title: Static Pile Load T	Tests on Driven P	iles int	to Intermediate Geo Ma	terials								
Project investigator: James H Long				e: 217 333-2543		E-mail: jhlong@uiuc.edu							
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Wis	DOT contact: Jeffrey Hor	sfall	Phone	e: 698 243-5993		E-mail: Jeffrey.Horsfall@dot.wi.gov							
WisDOT project ID: 0092-12-08				project ID:		Project start date: 8/1/2011							
Orig	inal end date: 8/1/2011	(	Curren	nt end date: 6/30/2014	ļ	Number of extensions: 1							
Project schedule status:  ☐ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule													
Proj	ect budget status:												
	Total Project Budget	Expenditure Current Quar		Total Expenditures		% Funds Expended	% Work Completed						
	\$95,000,00	\$50.00		\$52.841.00		60%	72%						

#### **Project description:**

The objective of the research is to develop and perform three static pile load tests and evaluate the results for piles driven into intermediate Geomaterials. Three different locations will be identified around the state. The H-piles shall be driven into IGM under current WisDOT design and construction standards. The static pile load tests, with PDA/CAPWAP analysis will help the department better understand the conditions of driving H-piles in IGM.

**Progress this quarter** We are continuing to review the analysis results for the 1<sup>st</sup> and 2<sup>nd</sup> set of static and dynamic load tests and are putting together a package of results that will be reviewed by an independent expert in pile dynamic testing. We are currently reviewing other work on piles in intermediate geomaterials, and we are getting materials together to make a presentation to the Technical Review Panel.

#### Anticipated work next quarter:

Further field work will be conducted as load test projects are identified by WisDOT become available. We will present results to the technical review panel in the second quarter of 2014.

#### Circumstances affecting project or budget:

This next quarter, we will requested another no-cost extension for this project to accommodate the inclusion of the 3<sup>rd</sup> set of static and dynamic load tests. I suggest another 8 month extension which will extend the project to February 28, 2015. Scheduling the anticipated load tests is dependent on the Wisconsin DOT construction schedule. Two locations have already been tested, and one location for load testing remains. We are within the budget estimates and do not anticipate a change in budget, even if a time extension is necessary.

## Attach / insert Gantt chart and other project documentation

Static Pile Load	Tests on	<b>Driven Piles</b>	into
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	Intermediate Geo-Materials	. 1	2	3	- 4	- 5	6	7	- 8	9	10	-11	12	13	14	16	16	17	18
			39 Y	2011	1		2 %		8 8		8-	20	112	37.7		el s		8	2013
Task	Description	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
<b>.</b>	Literature Search and Background Study																		
2	Development of Requirements for Pile Installation and Load Test Setup								Ì										
3	Evaluation and Monitoring of Static Pile Load Tests																		
4a	Data Analysis, Summary		1		100				1 1			8						5_1	
4b	Draft report and Final Report		0		3				1 0			ri v						3 (1)	
	Meeting with TOC committee in Madison	M					М								$\vdash$		$\vdash$		M

### FOR WISDOT USE ONLY

Staff receiving QPR:	Date received:
Staff approving QPR:	Date approved: